

**VERSION WITH MARKINGS TO SHOW CHANGES MADE:**

**IN THE CLAIMS:**

Cancel claims 1-5, 7-8, and 11 without prejudice.

Amend the following claims:

6. (Amended) ~~The Multiple-row radial bearing according to of claim 2 9, characterized in that wherein~~ the inner race (2) is provided with a circumferential lubricating groove (8) and with one or more radial lubricating bores (9).
9. (Amended) A double-row radial cylindrical roller bearing, comprising:
- a single-piece inner race provided with a central collar and two outer collars;
  - an outer race having interiorly a circumferential groove and provided with a central collar in the form of a single-piece T-shaped ring including a slot to provide the ring with variable diameter, said ring having a circumferential outer rib, which is engageable in the circumferential groove and arranged in one of central relationship and off center relationship with respect to a width of the ring, and two opposite axial ends which expand in a radial extension and rest against a running surface of the outer race; and
  - rolling elements rolling between the inner and outer races.

**Add the following claims:**

18. (New) Multiple-row radial bearing according to claim 8, characterized in that the friction-reducing material is polytetrafluoroethylene (PTFE).
19. (New) The bearing of claim 9, wherein the axial ends of the ring expand in a radial extension and rest against a running surface of the outer race.
20. (New) The bearing of claim 17 defining a bearing axis, said slot extending parallel to the bearing axis.
21. (New) The bearing of claim 16, wherein the inner race has two outer collars provided with a sealing element.
22. (New) The bearing of claim 16, wherein the T-shaped ring is subjected to a hardening process.
23. (New) The bearing of claim 16, wherein the T-shaped ring is coated with a friction-reducing material.
24. (New) The bearing of claim 23, wherein the friction-reducing material is polytetrafluoroethylene (PTFE).

## REMARKS

The last Office Action of March 1, 2002 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1 to 17 are pending in the application. Claims 1-5, 7-8, and 11 have now been canceled. Claims 6 and 9 have been amended. Claims 18 to 24 have been added. A total of 16 claims are now on file in the above-identified application. No fee is due.

It is noted that the drawings are objected to because of applicant's failure to show every feature set forth in the claims. It is further noted that claim 8 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 3,954,313 (hereinafter "Haenel") in view of U.S. Pat. No. 4,798,482 (hereinafter "Kruk").

Claims 1-4, 6-11, 12-15 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Haenel in view of Kruk, and further in view of U.S. Pat. No. 1,970,449 (hereinafter "Gibbons et al.").

Claim 5 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Haenel and further in view of U.S. Pat. No. 4,336,971 (hereinafter "Reiter").

## **OBJECTION TO THE DRAWING**

Applicants have canceled claims 4 and 11, and have amended claim 9 by deleting the reference to the "off center relationship" of the outer rib with respect to the width of the ring.

Withdrawal of the objection to the drawing is thus respectfully requested.

## **REJECTION UNDER 35 U.S.C. §112, SECOND PARAGRAPH**

Applicants have canceled claim 8. As a result of the cancellation of claim 8, the rejection under 35 U.S.C. §112, second paragraph becomes moot.

Withdrawal of the rejection under 35 U.S.C. §112, second paragraph is thus respectfully requested.

## **REJECTION OF CLAIM 16 UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER HAENEL IN VIEW OF KRUK**

The Examiner's rejection is confusing for the following reason: On page 3, last paragraph, the Examiner refers to the rejection of claim 16 only. However, on page 4, the Examiner also made reference to claims 8, 14 and 15 which do not depend on claim 16 or relate to the last paragraph of page 3. Accordingly, the rejection of claims 8, 14 and 15 has been treated separately as a rejection under 35 U.S.C. 103(a) as being unpatentable over Haenel alone.

The rejection under 35 U.S.C. §103(a) is respectfully traversed.

The present invention, as set forth in claim 16, is directed to a roller bearing which has a T-shaped ring formed with an annular rib for securement in the annular groove of the outer race and projecting out from the outer race so as to form engagement surfaces for neighboring rolling elements. According to claim 16, the T-shaped ring is in direct contact with the rolling elements to thereby absorb forces applied by the rolling elements in an axial direction.

The Haenel reference is directed to an anti-friction roll bearing which includes a flanged retaining rim (9) positioned between the rolling bodies and secured to the outer race by rivets inserted through holes in the retaining rim and deformed in conventional manner. Applicants submit that Haenel not only fails to disclose the provision of a T-shaped ring, as the Examiner correctly noted, but also fails to disclose the type of securement of such a ring to the outer race. While the T-shaped ring according to the present invention has a rib which is held in place in a groove of the outer race, Haenel describes the use of rivets. This type of connection is complex and time consuming and as a consequence of the provision of holes also detrimental to the strength of the component.

To make a case for obviousness, the Examiner combined the Haenel reference with Kruk which describes a roller bearing which includes an annular spacer (7) positioned in a through-opening or gap between **separate** outer rings (1, 2), which form the outer race, in order to maintain the outer rings at operating distance. While the spacer has a T-shaped configuration (Fig. 2), it is applicants' belief that a person skilled in the art would not make the combination,

as suggested by the Examiner. The subject matter of the Haenel reference is clearly and unmistakably directed to a roll bearing that purports to facilitate assembly thereof by perforating the rim in order to allow application of rivets for establishing the connection between the rim and the outer race. As stated above, the purpose of the spacer of Kruk is to fix the outer rings in precise operating position with respect to one another. Unlike the present invention, in which the annular (radial) rib of the T-shaped ring is received in a groove of the outer race for securement, the spacer of Kruk is secured via the axially directed legs (11) which abut against the outer race, and unlike the present invention, in which the T-shaped ring has engagement surfaces in contact with the rollers, the Kruk spacer does not contact at all the rollers.

It is well established that there must be some motivation to combine the references to create the case of obviousness, and a showing that a skilled artisan, confronted with the problems as the inventor, would select the elements from the cited prior art references. Haenel does not motivate the artisan to make the suggested combination. This is true, especially because of Haenel's clearly stated benefit of the riveted securement, as described.

Please note also that the fact that individual elements of the present invention can be found in the prior art is not determinative as to the question of obviousness. As stated by the Federal Circuit in *In re Rouffet*, 47 USPQ2d, 1453, 1457 "Most, if not all, inventions are combinations and mostly of old element. Therefore, an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to

negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an illogical and inappropriate process by which to determine patentability."

It is applicant's contention, that the Examiner failed to make a prima facie case of obviousness and failed to explain the motivation one with no knowledge of applicant's invention would have to combine the references in a manner suggested.

For the reasons set forth above, it is applicant's contention that neither Haenel nor Kruk, nor a combination thereof teaches or suggests the features of the present invention, as recited in claim 16.

Claims 17, 19 to 24 depend from claim 16 and therefore contain all the limitations thereof. Therefore, these claims patentably distinguish over the applied prior art in the same manner as claim 16. Please note that applicants have added claims 19 to 24, the subject matter of which corresponds to the subject matter of claims 10, 12-15 and 6.

Withdrawal of the rejection of claim 16 under 35 U.S.C. §103(a) and allowance of claims 16, 17 and 19-24 are thus respectfully requested.

**REJECTION OF CLAIMS 1-4, 6-11, 12-15 AND 17 UNDER 35 U.S.C. §103(a) AS  
BEING UNPATENTABLE OVER HAENEL IN VIEW OF KRUK AND FURTHER  
IN VIEW OF GIBBONS**

The rejection under 35 U.S.C. §103(a) is respectfully traversed.

Claims 1 to 5, 7 and 8 have been canceled because they had been written in a form that is not consistent with U.S. practice and their subject matter is, in fact, set forth in claims 9 to 15. Accordingly, applicant asserts that the cancellation of claims 1 to 5, 7 and 8 should not be considered a narrowing amendment relating to patentability within the meaning of the *Festo*-decision. *Festo Corp. v. Shoketsu Kinsoku Kogyo Kabushiki Co.*, 56 USPQ2d 1865 (Fed. Cir. Nov. 29, 2000)(en banc).

Claim 6 has been amended to present it in better form and language and to make it dependent on claim 9. These changes are cosmetic in nature and have not narrowed this claim within the meaning of the *Festo*-decision.

Claim 9 has been amended by deleting the reference to the "central or off center relationship of the outer rib with respect to the width of the ring" because this limitation, in fact, refers to any location of the rib. In addition, claim 9 has been amended by deleting the limitation relating to the particular configuration of the axial ends and their disposition. It is applicants' contention that to include this limitation in claim 9 would not properly define the full scope of what the inventors have invented and would rather limit applicants to an embodiment which is not justified in view of the art. The particular configuration of the axial ends and their

disposition have now been set forth in newly submitted claim 18. Accordingly, applicant asserts that the amendment to claim 9 should not be considered a narrowing amendment relating to patentability within the meaning of the *Festo*-decision.

Claim 9, as now on file, is directed to a double-row radial cylindrical bearing including an inner race having a central collar in the form of a single piece T-shaped ring which has a slot and includes an outer rib received in a groove of the outer race. In this way the overall manufacturing process of the bearing is simplified because the bearing races are continuous and uninterrupted (compare, e.g., paragraph [0006] of the instant specification). The need for separate retaining elements, as required, for example, in the Kruk bearing (fastening member 8) is eliminated (compare, e.g., paragraph [0008] of the instant specification).

The Examiner rejected claim 9 under 35 U.S.C. §103(a) as being unpatentable over Haenel in view of Kruk and further in view of Gibbons et al. However, the Examiner's rejection is confusing because no reference has been made to claim 9 per se so that the Examiner's rejection allows applicants only to speculate as to the portions of each reference relied upon and why those references would contain a teaching, suggestion, reason, motivation or incentive leading to the claimed invention. The Examiner clearly failed to comply with the practice set forth in §706.02(j) of the Manual of Patent Examining Procedure which contains a discussion of what an Examiner should set forth in an Office Action under 35 U.S.C. §103(a). Accordingly, the Examiner is requested to indicate to applicants which specific portions (page and line or figure) of each of the

references the Examiner refers to base his rejection on. *Ex parte Gambogi*, 62 USPQ2d, 1209 (Board of Patent Appeals and Interferences), *Ex parte Jones*, 62 USPQ2d, 1206 (Board of Patent Appeals and Interferences).

The Haenel and Kruk references have been discussed above, and the same arguments submitted are essentially applicable here as well. Apart from the fact that neither Haenel nor Kruk teaches or suggest a T-shaped ring having a rib received in a groove of the outer race, so as to simplify the manufacturing process of the bearing, neither of these references teaches or suggests the provision of a slot, as the Examiner readily conceded. The Examiner applied, however, the reference to Gibbons which describes a single-row roller bearing including a split end ring (24) to transmit thrust forces to the outer race. Applicants fail to see the motivation of combining the references, as suggested. Haenel teaches the provision of a plurality of rivets to connect the retaining rim to the outer race and thus requires the provision of a plurality of holes. The provision of a slot in such a retaining rim could not have been contemplated since the riveted connection fixes the retaining ring in place, and a contraction of the retaining rim is thus neither desired nor intended because it would result in a misalignment of the holes in the retaining ring and the outer race.

The Examiner's reasoning for rejection is clearly based upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. *In re Gorman*, 933 F.2d 982. There is no teaching or suggestion supporting the combination as

proposed by the Examiner. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 733 F.2d at 902.

For the reasons set forth above, it is applicant's contention that neither Haenel nor Kruk, nor Gibbons et al., nor a combination thereof teaches or suggests the features of the present invention, as recited in claim 9.

Claims 6, 10, 12-15 depend from claim 9 and therefore contain all the limitations thereof. As such claims 6, 10, 12-15 patentably distinguish over the applied prior art in the same manner as claim 9.

With respect to the rejection of claims 14 and 15, applicants note that the Examiner took Official Notice "*that it would have been obvious [ ] to coat the ring with PTFE*". Applicant believes that this rejection is improper in the context of the present invention and requests a citation or an Examiner's affidavit that provides such citations.

Withdrawal of the rejection of claims 9, 6, 10, 12-15 under 35 U.S.C. §103(a) and allowance thereof are thus respectfully requested.

## CITED REFERENCES

Applicant has also carefully scrutinized the further cited prior art and finds it without any relevance to the newly submitted claims. It is thus felt that no specific discussion thereof is necessary.

## CONCLUSION

Applicant believes that when the Examiner reconsiders the claims in the light of the above comments, he will agree that the invention is in no way properly met or anticipated or even suggested by any of the references however they are considered. In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

By: \_\_\_\_\_

  
Henry M. Feiereisen  
Agent For Applicant  
Reg. No: 31,084

Date: May 31, 2002  
350 Fifth Avenue, Suite 3220  
New York, N.Y. 10118  
(212)244-5500  
HMF:af